What is Claimed is:

1. A wide-area nano-size imprinting stamp, comprising:

a substrate including a base surface having a usable area;

a plurality of imprint stamps in contact with the base surface and extending outward therefrom, the imprint stamps are spaced apart from one another and the imprint stamps are positioned so that they occupy substantially all of the usable area,

each imprint stamp has a predetermined shape and includes a micro-feature having opposed side surfaces and a plurality of spacers extending laterally outward of the opposed side surfaces,

the micro-feature and the spacers extend outward of the base surface and the micro-feature and the spacers include a height and a width that varies among the micro-feature and the spacers to define an imprint profile.

2. The wide-area nano-size imprinting stamp as set forth in Claim 1, wherein the predetermined shape is a shape selected from the group consisting of a shape that is identical among all of the imprint stamps, a shape that varies among all of the imprint stamps, and a combination of shapes that are identical and shape that vary among all of the imprint stamps.

3. The wide-area nano-size imprinting stamp as set forth in Claim 1, wherein the micro-feature is made from a material selected from the group consisting of silicon oxide, silicon nitride, polysilicon, a metal, silicon oxynitride, silicon carbide, diamond like carbon, and a silicide.

4. The wide-area nano-size imprinting stamp as set forth in Claim 1, wherein the spacer is made from a material selected from the group consisting of silicon oxide, silicon nitride, polysilicon, a metal, silicon oxynitride, silicon carbide, diamond like carbon, and a silicide.

5. The wide-area nano-size imprinting stamp as set forth in Claim 1, wherein the substrate is made from a material selected from the group consisting of a glass, PYREX, silicon oxide, aluminum oxide, and indium phosphide.

6. The wide-area nano-size imprinting stamp as set forth in Claim 1, wherein the substrate is a semiconductor material.

7. The wide-area nano-size imprinting stamp as set forth in Claim 6, wherein the semiconductor material is silicon.

8. The wide-area nano-size imprinting stamp as set forth in Claim 1 and further including a filler layer disposed between adjacent imprint stamps.

9. The wide-area nano-size imprinting stamp as set forth in Claim 8, wherein the filler layer is a material selected from the group consisting of a tetraethylorthosilicate, a boron doped tetraethylorthosilicate, a phosphorous doped tetraethylorthosilicate, and a boron and phosphorous doped tetraethylorthosilicate.

10. The wide-area nano-size imprinting stamp as set forth in Claim 1, wherein the imprint stamps occupy an area that is less than substantially all of the usable area.

11. The wide-area nano-size imprinting stamp as set forth in Claim 10, wherein the area is partitioned into a plurality of die, the die are spaced apart from one another, each die including a die area, and within each die the imprint stamps occupy a sub-area selected from the group consisting of substantially all of the die area and less than the die area.

12. A method of forming a wide-area nano-size imprinting stamp, comprising:

depositing a feature layer on an usable area of a base surface of a substrate;

patterning and then dry etching the feature layer to define a plurality of micro-features having a top surface and opposed side surfaces;

conformally growing a spacer layer on the micro-features until the spacer layer has a desired thickness that is substantially equal on the top and opposed side surfaces;

anisotropically etching the spacer layer to remove a portion of the spacer layer that is disposed on the top surface to define a plurality of imprint stamps that include a plurality spacers disposed on the opposed side surfaces of their respective micro-features;

repeating the conformal growing and the anisotropically etching steps as necessary to define additional spacers on the imprint stamps;

planarizing the imprint stamps so that the micro-features and the spacers extend outward of the base surface by a substantially identical height; and

selectively etching a selected one or more of the spacers and micro-features to define an imprint profile in the imprint stamps; and

repeating the selectively etching step as necessary to selectively etch a selected one or more of the spacer and micro-features to further define the imprint profile of the imprint stamps.

13. The method as set forth in Claim 12 and further comprising prior to the planarizing step, depositing a filler layer that completely covers the imprint stamps, followed by the planarizing step to planarize the imprint stamps and the filler layer so that the micro-features, the spacers, and the filer layer extend outward of the base surface by a substantially identical height.

14. The method as set forth in Claim 13 wherein the selectively etching step includes selectively etching the filler layer to a predetermined thickness.